



THE EXPERIMENT

No.1

TODAY'S CHALLENGE – TOMORROW'S DESTINY

Aug. 19, 1999

JEFX focus is future of command, control

Experimenting, testing, evaluating technology to aid EAF capabilities

By Maj. Russ Smith

505th Operations Squadron deputy director

HURLBURT FIELD, Fla. – The bottom line of Joint Expeditionary Force eXperiment '99 is about changing Air Force culture.

We're creating a venue for potentially revolutionary technology for the Expeditionary Aerospace Force concept by creating the command and control system which will enable the Aerospace Expeditionary Forces to function effectively.

We can have all the airplanes and weapon systems we want, but if we can't command and control them, we won't be expeditionary. JEFX is about creating a command and control system for the future. Uniformly, it's changing the Air Force mindset of 'doing business as usual' to 'let's get in there and make

things happen by thinking outside the box,' allowing us to do the job cheaper, faster, quicker and more effectively.

I frequently get asked by participants, "What do I need to do to make this experiment a success?"

My answer is, be flexible.

We're trying lots of new things here and your contribution is to see if the initiatives really work. We'll have things thrown at us that we've never experienced before, we'll be expected to work on systems and processes we've never worked with before, and we'll be asked to do our job in a way we've never done before.

We're relying on your expertise to

know the end product you have in sight remains the same, it's just how we get there that's different.

Don't be afraid of this experiment. To some, this event may seem intimi-

dating, but let's go into this with open minds. We're all familiar with exercises. We all know what we want to get out of an exercise, what we need to do and we get ourselves pumped to do a good job and meet the objectives.

"We can have all the airplanes and weapon systems we want, but if we can't command and control them, we won't be expeditionary."

– Maj. Russ Smith
505th Operations Squadron
deputy director

This experiment is similar to an exercise, but differs in that it allows us the flexibility of working without a checklist and moving in a totally different

See FUTURE, Page 2

Gunfighters gear up for experiment roles

Mountain Home AFB to provide personnel, strike aircraft for live-fly

By Capt. James Law

366th Wing Public Affairs

MOUNTAIN HOME AIR FORCE BASE, Idaho – Following in last year's success at Expeditionary Force eXperiment '98, the Gunfighters will play a key role in demonstrating the continued effectiveness of expeditionary operations in Joint Expeditionary Force eXperiment '99.

During the first experi-

ment, 366th Wing people and aircraft provided the largest contingent of people and aircraft when they "invaded" the beaches of Florida as the core of an air expeditionary force that tested new command and control initiatives.

This year's experiment, which runs through Sept. 3, has the live-fly portion taking place over the Nellis training ranges.

These experiments, say Air Force officials, explore

emerging technologies, procedures and requirements to strengthen Air Force competencies.

Unlike exercises that train military members on established procedures, the annual experiments test new, unproven initiatives, doctrine and equipment which one day may become reality. And by concurrently testing and evaluating programs in development during the experiments, it saves the service considerable time and money.

Wing personnel from various units, including the

366th Operations Support Squadron and the Air Expeditionary Force Battlelab, were involved in several initiatives last year.

Both the en route Expeditionary Operations Center and the Beyond Line of Sight projects, received high marks from participants and extensive publicity in newspapers, television news programs and a *Discovery Channel* documentary.

This year's experiment builds on 1998 successes and adds a coalition structure,

See GUNS, Page 5

Perryman welcomes JEFX participants

By Maj. Gen. Gerald F. Perryman Jr.
Aerospace Command and Control and
Intelligence, Surveillance, and Reconnaissance Center commander



**Maj. Gen.
Gerald F. Perryman Jr.**

LANGLEY AIR FORCE BASE, Va. – Welcome to Joint Expeditionary Force eXperiment – JEFX '99. This large-scale Air Force experiment, the second in the series, will have far reaching implications for the future of joint warfare.

JEFX '99 expands on the lessons learned throughout EFX '98 and includes a more robust integration of space-based capabilities and space derived information into aerospace operations. Additionally, this year's experiment incorporates greater joint and coalition participation, to more accurately reflect how we plan to fight. Two full Aerospace Expeditionary

Forces (AEF) along with live fly and constructive simulations form the basis for JEFX '99 "laboratory."

During the experiment, warfighters, support personnel, developers and assessors work together as a team. By involving warfighters early in the development of new concepts and technologies, we are able to provide more operationally focused systems and processes necessary to reach Joint Vision 2010 – a vision that will meld the contributions of all the services in the years to come.

Experimentation is in our heritage – as an Air Force and as a nation. It is the venue from which innovative ideas and concepts spring forward. With your support, we can all work together to continue this newly invigorated effort in Air Force experimentation and find innovative ways to better defend this great nation.

Future (Continued from Page 1)

direction if what you find you're doing isn't working the way it should.

There are no fouls. Trying something and discovering it doesn't work teaches us as much about success as something that works well from the start.

We're all familiar with Thomas Edison and other great inventors of the past who tested new concepts that didn't work, but what they learned in the process eventually led to a concept that works and that's exactly what we are doing here. Much of the stuff we're trying this year may not work, but we're going to find gold nuggets here and there that will advance the state of the art of Air Force command and control that will enable the AEF in the future.

Keep in mind that systems are secondary to this experiment. We can develop and design a tool to do anything we want, but what's really important in this environment, is to change the way people think and the processes in which they do business. A tool simply enables

a person to do their job better. The new technology we'll be working with here is just another step on the path to improved command and control. So, don't get enamored with systems – get enamored with the processes that make things work more efficiently to get decisions made, the job done properly and saving lives in the process.

And lastly, one of the best lessons we'll learn from this event is how to function as a team. The technology we'll get to work with is great and there are a lot of good ideas, but more importantly this experiment is encouraging fields that previously worked in isolated environments to integrate. For instance, space and air experts are learning how to work together

and likewise, within the support world, communications and systems people are working together in a way that's never been done before. In the past, these offices maintained a long distance relationship, but with the advent of information operations, these different fields need to understand how the other works in order for everyone to do their job more efficiently.

We truly appreciate the effort everyone is putting into this because what we are doing here is for the greater good of the Air Force's future. What we're doing may not mean a thing right away, but several years from now it will be because your findings will contribute to finding a better way of doing business through the AEF.

"Trying something and discovering it doesn't work teaches us as much about success as something that works well from the start."

– Maj. Russ Smith
505th Operations Squadron
deputy director

THE EXPERIMENT

The eXperiment is a funded U.S. Air Force newsletter and is an authorized publication for members of the U.S. military services. Contents of The eXperiment are not necessarily the official views of, or endorsed by, the U.S. Government, Department of Defense or the Department of the Air Force. The editorial content is edited, prepared and provided by the JEFX '99 public affairs teams. All photographs are U.S. Air Force photographs unless

otherwise indicated. Please post on unit bulletin boards and pass this copy on to others who need current JEFX '99 news and information. Reproduce as needed.

THE EXPERIMENT STAFF

JEFX '99 commander Lt. Gen. Lanceford Trapp
Public Affairs Director Capt. Craig Heighton
Public Affairs Deputy Director 1st Lt. Tom Knowles
Editor Staff Sgt. Karin Wickwire

News notes

Public affairs

Information for "The eXperiment," may be submitted to the local public affairs cell.

At **Hurlburt Field, Fla.**, newsletter items or story ideas may be submitted to Staff Sgt. Karin Wickwire at the Joint Personnel Access Center in Bldg. 90005 or call (850) 884-8342.

At **Langley Air Force Base, Va.**, submit information and stories to 2nd Lt. Dani Burrows at the JPAC in Bldg. 12 or call (757) 225-1262.

At **Nellis AFB, Nev.**, information and story ideas may be submitted to Staff Sgt. Paul Couprud at the JPAC in Bldg 254 or call (702) 652-9891.

"The eXperiment" newsletter will be published on the following dates: Aug. 24, Aug. 27, Aug. 31 and Sept. 3.

Hurlburt Field Hurricane locator sheets

All personnel located at Hurlburt Field, Fla., during JEFX '99 need to fill out a Hurricane Locator Sheet. Due to Florida's hurricane season, which runs through Nov. 1, it's important this information is accurate.

In the event of a hurricane, people who are caught away from their designated shelter locations must call (800) 435-9941 so they can be accounted for.

JPAC: Personnel access center's hub for experiment in-processing, support

By 2nd Lt. Danielle Burrows
JEFX Public Affairs

LANGLEY AIR FORCE BASE, Va. – The Joint Personnel Access Center is the first stop for Joint Expeditionary Force eXperiment '99 participants. JPAC is the hub for in-processing and mission support.

Here, the JPAC has in-processed more than 480 players, observers and support staff.

"In any operation, you have people who support that operation – that's what the JPAC is," said Col. Steve Bunn, Langley JPAC director. The JPAC provides security, keeps track of the participants and provides the necessary support functions while giving visitors the opportunity to see what JEFX '99 is about, said Bunn.

Providing support for all cells here is the overall mission of Langley's JPAC, according to Master Sgt. Angela Harwell, database and itinerary lead.

The JPAC staff is made up

of mission support, protocol, public affairs, briefers, database, transportation and personnel.

Mission support is responsible for all in-processing. They upload personnel information to the computers, confirm security clearances and issue badges to participants. Lodging is the contact point for JEFX '99 staff and players needing billeting arrangements.

The mission support team operates a 24-hour phone line for emergencies or for people who need to get in contact with the JPAC after normal duty hours. That number at Langley is DSN 574-1274.

Protocol's job is to escort and brief distinguished visitors. Because of the large amount of visitors, only brigadier general (selects) and above are considered DVs at JEFX '99.

Protocol and public affairs work together to create the visitor information packets.

Public affairs is responsible for media visits to JEFX '99 and also for bringing in-

formation to the JEFX '99 players and staff through the JEFX newsletter, "The eXperiment."

The briefers play a role in in-

processing, helping participants understand what JEFX '99 is about and answering their questions.

Database generates a daily list of visitors, including DVs and media, and reports the results at the end of the day.

Transportation manages DV rental cars and the shuttle bus for experiment participants.

Personnel maintains personnel information on all JEFX '99 participants.

"In any operation, you have people who support that operation – that's what the JPAC is."

– Col. Steve Bunn
Langley JPAC director.

Emergency contact numbers during JEFX

Emergencies can happen to anyone at any time. During a deployment or temporary duty assignment, such as Joint Expeditionary Force eXperiment '99, knowing the right numbers and people to call can be critical in the event of an emergency.

Each JEFX '99 location has a first sergeant and a 24-hour duty section which may be contacted in the event of an emergency.

Langley AFB, Va.

Primary point of contact – Master Sgt. Ray LaGasse, Langley first sergeant. Work phone (757) 764-5176; Pager 988-2114.

Alternate POC – Langley Joint Person-

nel Access Center (24-hour access). Phone (757) 225-1274.

Hurlburt Field, Fla.

Primary POC – Master Sgt. Dan Kuhn, Hurlburt first sergeant. Work phone (850) 884-7204; Home phone (850) 651-6462; Pager (850) 885-1984.

Alternate POC – Hurlburt JPAC (24-hour access). Phone (850) 884-7226.

Nellis AFB, Nev.

Primary POC – Master Sgt. Jeffery Holloway, Nellis first sergeant. Cellular phone (702) 375-7464.

Alternate POC – Nellis JEFX locator (24-hour access). Phone (702) 652-9892.

JEFX congratulates new staff sergeant selectees

The staff sergeant selection list released Wednesday held great news for a number of airmen who are participating in Joint Expeditionary Force eXperiment '99.

The following JEFX senior airmen have been selected for promotion to staff sergeant:

Kristie Caparotta, Bradley R. Carroll, Jared Caulley, Spring Clegg, Alejandro Correia, Brian Fahnestock,

Melanie J. Finuf, Robert F. Greer, Matthew Lundh, Sebastino Marino, Holly McGuinness, Karen L. Mitchell, Clifford W. Morgan, Jeremy Nylander, Gregory Osgood and Shelley A. Standley.

This is not a complete list of staff selectees who are participating in JEFX '99.

Anyone who was selected and was

not on this list should contact their local JEFX public affairs cell to be recognized in the Aug. 24 newsletter.

A complete list of the new staff sergeants will be posted on the Air Force Personnel Center's

home page at <http://www.afpc.randolph.af.mil> by 2

p.m. CST today.



Experiment areas require proper badges

by Staff Sgt. Karin Wickwire
JEFX Editor

HURLBURT FIELD, Fla. — “Badges?”

“We don’t need no stinkin’ badges!”

While those lines worked in the movie, “The Treasure

of the Sierra Madre,” they won’t work during the 1999 Joint Expeditionary Force eXperiment.

In fact, every person who participates in, supports or even visits JEFX '99 must have a badge of some kind to gain entry into the experi-

ment areas, according to Staff Sgt. Tony Lamb, assistant JEFX security manager at Hurlburt Field, Fla.

There are seven badges being used throughout JEFX '99. Each badge is a different color to signify the badge holder's role in the experiment, Lamb said.

The colored badges are identified as follows:

WHITE

This badge has the words

“Visitor/Observer” printed in black. The badges are for people who aren’t a part of the experiment but have business in the JEFX area.

ORANGE

The word “Support” is written in blue ink. This is for people who are supporting the experiment, such as security forces and personnel.

BLUE

The blue badge has the word “Player” printed in yellow. This badge is worn by U.S. personnel who are participants in JEFX '99.

PURPLE

This badge has “Coalition Players” written in yellow. It is worn by the U.S. foreign national allies who are participating in the experiment.

YELLOW

The yellow badge has “Assessment” written in blue. It’s worn by the experiment assessors.

GREEN

The word “Controller” is in black ink. This badge is worn by the people who are

running the experiment.

RED

This badge has the words “Escort Required” printed in yellow and, in some locations, a large black “V” is marked on the front. This badge is worn by experiment visitors who must have an escort.

Any member of JEFX '99 who sees a person with a red badge who doesn’t have an escort should approach the visitor to determine where his or her escort is, Lamb said.

If the escort can’t be found, the visitor must be taken to the Joint Personnel Access Center where he or she will stay until the designated escort is located, he said.

Because the badges are controlled items there are a few guidelines which must be followed once a JEFX '99 badge has been issued. Guidelines can be found on the left-hand side of this page.

Questions regarding the badges should be directed to the local JEFX security forces manager.

Badge guidelines

1. The badge is a controlled item, like a military identification card, and as such it should be accounted for at all times.

2. Badges must be exposed at all times when in the experiment areas. If the badge is not exposed, the holder may be challenged to provide proper access authority by security forces or other JEFX participants.

3. The badge must be secured when not in a JEFX area. There is no reason to show a JEFX badge at the base exchange or the dining facility.

4. A picture ID must be carried with the badge while the badge holder is in the experiment areas. Military members must use their military ID card; civilians may show their driver’s license or other valid picture ID.

For additional information regarding badges, please contact the local JEFX security forces manager.

Getting from here to there during JEFX

By Senior Airman J.A. Lindsey
JEFX Public Affairs

HURLBURT FIELD, Fla. – Working the challenges of providing transportation for Joint Expeditionary Force eXperiment personnel is the task faced by the transportation cell. Two travel options available to those here on temporary duty are the transportation cell shuttle service and government-funded rental cars.

"I want to make life enjoyable for everyone here," said Tech. Sgt. Andy McLean, Hurlburt JEFX transportation chief. "I worked transportation for last year's experiment and found some ideas worked and others didn't – participation is the key."

One idea – a lunch shuttle from buildings 90063 and 90005 to four on-base eateries – begins today at 11 a.m. Pick-up is at the front entrance of each location.

"We'll do round robin pick-ups and drop-offs until 1 p.m. This is one of those initiatives where participation is the key to keeping the service available," McLean said.

Another service beginning today is an off-duty leisure shuttle service.

"These shuttles are geared for groups of four or more people going to the Eglin beach club or the mall for a few hours and will be offered on an on-call basis starting today," McLean explained.

Shuttle service to other on-base facilities, such as the gym, is also offered on an as-available basis.

Rental cars are another alternative to getting around. Sharing of the 56 rental cars and 18 government vehicles divvied amongst the JEFX work teams is permitted and encouraged by transportation, keeping in mind whoever has the key is responsible for its care.

Cleaned and refueled rental vehicles assigned to JEFX cells should be returned to the transportation office the day before their portion of the experiment ends. Rental cars can be refueled

next to the Hurlburt Shoppette using the military pumps and refueling key. Blue fleet government vehicles can be refueled using the fuel key attached to the vehicle key ring at the Duke Field and Eglin Air Force Base pumps.

Refueling keys for the government vehicles are kept in the JEFX transportation cell office, trailer 11.

"We ask that everyone be patient – we promise to do our best to accommodate everyone to the best of our ability," McLean added.

"Communication and coordination are the biggest challenges for us to overcome in meeting everyone's transportation needs. Coordinating

group travel for shuttle service or car pooling using the rentals is the best and most efficient way we can all save time and money here."

"Communication and coordination are the biggest challenges for us to overcome in meeting everyone's transportation needs."

– Tech. Sgt. Andy McLean
Hurlburt JEFX transportation chief

Shuttle information, phone numbers

Langley AFB, Va.

A shuttle schedule runs from 6:30 a.m.-8:40 p.m. between the hotels and the experiment areas.

The shuttle leaves the Omni at 6:30 a.m. and 7:30 a.m. and returns at 6:30 p.m. and 7:30 p.m.

Shuttles leave the Quality Inn, Hampton Inn, Holiday Inn and Candle Wood at 6:40 a.m. and 7:40 a.m. and return at 6:40 p.m. and 7:40 p.m.

The shuttle for the OSC/NOSC leaves at 7:40

a.m. and 8:40 a.m. and returns at 7:40 p.m. and 8:40 p.m.

For transportation at all other times, call the 24-hour shuttle dispatch at (757) 764-5714.

Hurlburt Field, Fla.

Twenty-four hour transportation is available by calling (850) 884-7266.

Nellis AFB, Nev.

Twenty-four hour transportation is available by calling (709) 379-6206.

Guns (Continued from Page 1)

two air expeditionary forces and increased airlift participation, and emphasis on air and space integration.

Still, the Gunfighters will provide more than half of the strike aircraft and personnel for the live-fly portion of the experiment. The experiment scenario will reflect the Air Force's new structure of air expeditionary forces and air expeditionary wings.

Two mythical countries, Califon (California) and Nevidah (Nevada) are at odds over mineral fields that are located on their common border.

When Califon invades Nevidah, an air expeditionary force from the United States deploys to keep the peace. The situation deteriorates and a second expeditionary force which has been on-call – the

Gunfighters – are called upon to assist.

This scenario reflects what the Air Force will do with the new on-call schedule that begins this fall.

Ten AEF's will take care of steady-state deployments like Operations Southern Watch while two AEW's will respond to pop-up contingencies that require support.

Since last year's experi-

ment ended, Gunfighters have been working on initiatives that will be tested in the coming weeks. Further improvements have been made to the en route EOC pallet and advances have been made to improve communications between the pallet and B-1 crews.

Visit <http://afeo.langley.af.mil> for more information on JEFX '99.

JEFX explores new warfighting concepts, technologies

By Staff Sgt. Paul Coupaud
JEFX Public Affairs

NELLIS AIR FORCE BASE, Nev. — A multi-service flight of aircraft streak across the sky toward their targets. As the aircraft approach the area of operations, ground controllers divert part of the package to deal with another immediate threat. In the cockpits, the very latest target intelligence and imagery streams in to give aircrews the most accurate and current picture of their new objectives.

A scenario like this wasn't even possible just a few short years ago. Even today, aircrews spend hours in planning detailed missions before ever stepping out to the aircraft. By the time crews are airborne and reach their target, the information they took with them is several hours old.

The new technologies the military is applying to its war fighting concepts during the 1999 Joint Expeditionary Forces eXperiment presents a realistic warfighting environment where the nation's armed forces can explore and field new concepts and capabilities.

Using sensor-to-decision maker-to-shooter technology, combined with airborne and satellite communications, ground controllers can redirect aircraft and send imagery directly to the cockpit in near real time. This streamlines the pre-mission planning process and gives aircrews the most up-to-date targeting information when they need it the most — in the air.

Differing from an exercise or a test, the formal experimentation process is something relatively new to most of the Air Force.

"In an exercise we teach and train with existing doctrine, processes and equipment," said Col. Curt Neal, Nellis



Photo by Staff Sgt. Paul Coupaud

Sitting at Time Critical Targeting computers, (from left) Master Sgt. Eric Wood, Senior Airman Crystal Grell and Staff Sgt. Jason Reding, demonstrate one of the many systems in the Battle Control Center at Nellis AFB, Nev.

JEFX director. "In testing, we look at something new and measure it to a specific criteria. But experimentation is all about learning. If something doesn't work out as planned during an experiment, it's not a failure — it's a learning experience."

With more than \$60 million and 4,000 people across 10 locations committed to JEFX '99, this is the second ever large-scale experiment for the Air Force.

"The first, EFX '98, provided the building blocks upon which we're conducting our experiment this year," Neal said. "This is very similar to Red Flag except it's bigger and involves more than just the operators — this experiment deals with all facets of the military's command and control, intelligence, surveillance and reconnaissance structure."

Approximately 1,300 active duty, Guard, Reserve and contractor personnel are gathering at Nellis to provide and support the "live fly" portion of the experiment. Teams at Langley AFB, Va., and Hurlburt Field, Fla., are playing major roles in the experiment while other AF units and the Army, Navy and Marines are also participating.

In the simulated wartime scenario,

the Air Expeditionary Forces will defend a fictional ally against the military aggression of a neighboring country. Two mythical countries, Califon (California) and Nevidah (Nevada) are at odds over mineral fields located on their common border. When Califon invades Nevidah, an air expeditionary force from the United States deploys to keep the peace. The situation deteriorates and a second AEF that has been on call is brought in to assist.

AEF forces will be subjected to air-to-air and air-to-ground attacks, terrorist groups and special operations threats, standoff weapons (mortar rockets, snipers and portable surface-to-air missiles), and chemical and biological attacks. According to Neal, the challenge is to "right size" the AEF packages needed to counter the threats and deploy to the area of operations with accurate and timely intelligence necessary to execute the required tasks.

Neal said a weapons controller at Nellis or Hurlburt Field, Fla., will be able to see the Nellis and Ft. Irwin, Calif., ranges simultaneously and is able to communicate near-real time decisions based on the latest battle information.

"The level of realism is very high," he said. "A participant sitting at a console, watching three aircraft on his screen, won't be able to tell which one is a product of mathematical algorithms, which is being 'flown' with a simulator in New Mexico with a live pilot at the controls and which is an actual aircraft on the Nellis ranges."

"The bottom line for JEFX is to use our resources in a more effective manner and move information rather than people when possible. By effectively combining live-fly, simulations and technology insertions into our future warfighting environment, JEFX helps provide an operational climate to explore and field new concepts and capabilities to put the right people in the right place to do the right job."

"The bottom line for JEFX is to use our resources in a more effective manner and move information rather than people when possible"

— Col. Curt Neal
Nellis JEFX director